

Requirements for Minimization and Compensatory Mitigation
to Satisfy EPA's Objection

Following EPA's April 23, 2012, letter to the MDEQ in response to the January 23, 2012, Public Notice file number 11-52-0075-P, EPA has received additional information regarding the quality and quantity of the impacts of the proposed County Road 595 project. On October 31, 2012, EPA received the applicant's proposed alternative wetland mitigation plan. The applicant has not sufficiently minimized adverse effects to aquatic resources and the latest version of the applicant's Compensatory Mitigation Plan is deficient. Detailed requirements to further minimize adverse effects to aquatic ecosystems and to complete a mitigation plan to comply with the 404(b)(1) Guidelines¹ in order to allow MDEQ to issue a permit that satisfies EPA's objection are provided below:

Mitigation of Direct Impacts

The final wetland and stream compensatory mitigation plans must comply with the 2008 Federal Mitigation Rule (Compensatory Mitigation for Losses of Aquatic Resources; Final Rule).² To demonstrate that the proposed stream and wetland mitigation will sufficiently compensate for proposed impacts, the applicant shall provide the following, prior to permit issuance:

- Identification of a third-party land steward for long-term management of the wetland preservation site. The steward shall have land management experience managing wetland preservation sites.³
- Adaptive and long-term management plans for both stream and wetland mitigation that include a monitoring and reporting schedule and funding mechanism.³
- Measurable performance standards for stream mitigation. For example, for the goal of reducing sediment input to a stream, the applicant must specify how sediment input will be measured and provide a baseline with which to compare pre-mitigation and post-mitigation conditions.⁴

In addition, the applicant shall provide the following, prior to initiation of any permitted activities:

- A signed stewardship agreement with the land steward to maintain the proposed preservation area in perpetuity.²

¹ 40 C.F.R. Part 230

² 40 C.F.R. Part 230 Subpart J

³ 40 C.F.R. § 230.97 (c) (Adaptive management) and (d) (Long-term management)

⁴ 40 C.F.R. § 230.95 (Ecological performance standards)

- Demonstration that financial assurances are in place for construction and long-term management of both stream and wetland mitigation.^{3, 5}
- Demonstration that all necessary mineral rights to ensure that the wetland preservation area will be permanently protected have been secured, as required by the Mitigation Rule⁶ and Michigan's Natural Resources and Environmental Protection Act, Part 303, Section 324.30311d(2), which states, in part, "If compensatory wetland mitigation ... is required, ... [t]he permit applicant shall provide for the permanent protection of the wetland mitigation site." MDEQ guidance describes the type of documentation that would support permanent protection of a mitigation site. *Large Wetland Mitigation Sites* (September 7, 2004). This guidance document cites the subordination of any property interest, including mineral rights, as an important part of securing such protection. A general mineral report outlining mineral interests at a particular point in time is not sufficient to ensure that mineral rights do not threaten a mitigation area.

Minimization and Compensation for Indirect and Secondary Impacts

To minimize indirect and secondary impacts to aquatic resources from the CR 595 project and to fully demonstrate compliance with the Section 404(b)(1) Guidelines,⁷ the applicant shall provide the following documents prior to permit issuance:

- A detailed proposal describing the mechanism and locations of protected critical habitat areas. For instance, "to limit the building or connection of secondary roads in critical habitat areas, [the applicants shall] utilize the placement of conservation easements [or] deed restriction."⁸
- Plans for monitoring and managing wetlands along the CR 595 corridor for a minimum of 10 years. These plans shall include methods to assess, manage and mitigate for indirect impacts to aquatic resources resulting from the addition of pollutants, fragmentation, invasive species, and changes in overall wetland and stream functions.

In addition, the applicant shall demonstrate the following, prior to the initiation of any permitted activities:

- Long-term monitoring and maintenance plans for the applicant's proposed porous rock road design and wetland equalization culverts shall be completed to ensure that these structures perform as designed in the future.

⁵ 40 C.F.R. § 230.93(n) (Financial assurances)

⁶ 40 C.F.R. § 230.97 (a) (Site protection)

⁷ 40 C.F.R. Part 230 [404(b)(1) Guidelines]

⁸ August 27, 2012, MDOT, MDNR, MDARD letter to Regional Administrator Susan Hedman, U.S. Environmental Protection Agency.

- Real estate instrument(s), such as conservation easements or deed restrictions, shall be recorded to ensure the protection of critical habitat areas, including aquatic resources, from increased secondary development.
- Funding mechanisms shall be in place for long-term monitoring and management of indirect impacts.

In order to minimize aquatic habitat fragmentation impacts associated with the CR 595 project, the applicant shall include the construction of wildlife crossings in its road design. Prior to permit issuance, the applicant shall provide the following:

- A plan that includes the locations and design of wildlife crossings. Given the density of high quality habitat and wildlife in the area, the applicant shall construct an appropriate number of wildlife crossings to address fragmentation along the route, particularly in areas with the highest moose density as indicated on the Moose Survey Plots of Northern Marquette County map⁹. These crossings shall be large enough to accommodate larger wildlife species such as moose, cougar and bear. The applicant shall coordinate placement of the crossings with the MDNR and the U.S. Fish and Wildlife Service to ensure major wildlife travel corridors are accommodated. At a minimum, wildlife crossings shall be placed along major stream crossings. Fencing along the road to guide wildlife to the crossings shall be provided. The design will depend on the target wildlife species and the physical characteristics of the road corridor. Both the Federal Highway Administration and the U.S. Forest Service have developed guidelines that can be referenced when designing wildlife crossings.

⁹ Moose Survey Plots, e-mail from MDEQ to EPA (August 31,2012)